

Plate XIII.

Fig. 1.—*Belemnites australis*, Phillips? or *B. oxyis*, nobis. ventral aspect.

„ 2.—Ditto lateral aspect showing the slight curve of the lateral groove.

„ 3.—End view with alveolar cavity, lying on ventral surface.

All figures two-thirds natural size.

A SECOND HALF-CENTURY OF PLANTS NEW TO SOUTH QUEENSLAND.

BY THE REV. B. SCORTECHINI, F.L.S.

DILLENIACEÆ.

Hibbertia fasciculata, R. Br. in Dc. Syst. Veg. i, 428

On moist ground near Burleigh Head It departs from the typical species in the smaller size of its flowers. Having a wide geographical range, variations must occur, caused by its adaptability to different climates and various soils.

PITTOSPOREÆ.

Pittosporum phillyræoides, Dc. Prod. i., 347.

It is somewhat strange to find this plant on the eastern side of the dividing range. It looks like a straggler from its home. Although ubiquitous through the Australian continent on the western slopes and desert regions, the height of the Australian divide limits its geographical distribution towards the east. A few solitary trees of this *Pittosporum* may be seen growing on knolls of loose stones, which here and there give rise to tufts of vegetation close by the Dugundan jungle along the Teviot Brook.

BIXINEÆ.

Scolopia Brownii, F. v. M., Frag. iii., 11.

The flowers of the collected specimens being imperfect, afford no conclusive proof of the identity of this species; still there is left enough available to form a very probable opinion. There was no

other Queensland abode nearer than Rockingham Bay recorded for this plant. As on the other hand, records are extant of its being found on the Clarence in New South Wales, its presence at Tallebadgera, where my specimens were gathered, is not to be wondered at. In intermediate stations between South Queensland and Rockingham Bay, it may yet be discovered.

CARYOPHYLLÆ.

Stellaria flaccida, Hook, Comp. Bot. Mag. i., 275.

Years ago, specimens of this plant were obtained by me at Lytton, and later still, at Bundaberg on the Burnett.

SAPINDACEÆ.

Castanospora Alphandi. F. v. M. Frag. II.. 92.

Like *Scolopia Brownii*, F. v. M., there is no record of its existence in South Queensland, although it has been noticed at the Tweed River. This beautiful tree with an attractive foliage and large panicles of flowers, grows along the banks of Tallebadgera Creek, and a few miles further north on the Mudgeraba Creek. Several years ago it attracted my notice, and its flowers awakened an interest in it. For want of fruits, it was then impossible to assign to it any genus of the Sapindaceæ, to which order evidently it belonged. Only last summer the fruits were seen by me, and their shape, which reminds one of the chestnut, suggested the genus *Castanospora*, and on further examination it was found to be *Castanospora Alphandi*. Before the fruits were known, this tree was relegated among the *Cupania*. It is only within the present decade that that it was raised to generic rank. The name chosen by Baron von Müeller, is a most happy one, as at the first sight of the fruit, no one can mistake it for any other genus. Would that all botanists selected appropriate names for their new genera and species. Much trouble would be thus avoided.

LEGUMINOSÆ.

Goodia latifolia, Salisb. Par. Lond. i., 41.

Close to dense forests on the upper Nerang Creek. Its height reaches over fifteen feet, and its beautiful obovate leaflets exceed an inch in diameter. A very wide distribution may be claimed for this plant.

Hovea linearis, R. Br. in Ast. Hort., Kew iv., 275.

At Burleigh Head and other localities through the district.

Indigofera saxicola? F. v. M. in Fl. Austr. ii., 199.

It cannot with certainty be determined whether the specimens gathered at Coodria on the Teviot Brook, belong to this species or to an extreme variety of the widely distributed *I. australis* Willd. approaching *I. saxicola*. The number of leaflets in the Coodria specimens is invariably five, rather orbicular in shape, with latent veins; characters belonging to *I. saxicola* exclusively. Other characters obtained from the calyx and indumentum of the plant, point likewise to *I. saxicola*. Besides its habit, which gives a name to the species, is to grow among stones, where this plant is generally to be found. As the original specimens from which *I. saxicola* was described, are from such distant stations as North Australia, and Port Essington, and seemed to be confined there, a reasonable doubt may arise that the Coodria specimens are not of *I. saxicola*, but pertain to some extreme variety of the proteiform *I. australis*. If so, a link exists between *I. saxicola* and *I. australis*, which would render unstable the position of *I. saxicola* as a distinct species.

Acacia viscidula, A. Cunn. in Hook. Lond. Jour. i., 363.

At Minto's Craig on the Upper Teviot. The same species has been observed to grow in abundance in the neighbourhood of Stanthorpe.

Albizzia Hendersoni, F. v. M. Trin. Jour. 1872, p. 10.

This and its congener, *A. Tozeri*, F. v. M., grow very luxuriantly on the banks of Tallebadgera Creek. As graceful shrubs to adorn a garden, they can be compared to few plants. The characters on which the generic distribution of *Albizzia* and *Pithecolobium* rests, have been deemed of too slight importance by Baron von Müller to warrant the antonomy of both genera; and thus they have been fused by him into one genus, under the name of *Albizzia*. The extra-Australian genera so closely allied to them. *Calliandra*, Benth, *Enterolobium*, Mart. *Serianthes*, Benth, follow the same course, lose their independent status, and are admitted only as sections or sub-genera of *Albizzia*. These genera are difficult to

separate ; their union seems to be more natural. Still in practice they will long be kept distinct ; because their distinctive characters, although not strongly marked and highly important, yet afford artificial means for the easy recognition of their species. Baillon in his "Hist. des Plant," although omitting the genus *Albizzia*, still does not merge its species into the genus *Pithecolobium*, or allied genera, but frames for them a section under the prolific genus *Acacia*, while *Caliandra*, *Enterolobium*, *Serianthes* still keep their generic position. The genus *Albizzia* reconstructed according to Baron Müller's views forces some changes in the nomenclature of the species it embraces. What Bentham describes in Fl. aust. II., 424, as *Pithecolobium grandiflorum*, the occurrence of which on South Queensland soil, I noticed in a former paper to this Society, should be *Albizzia grandiflora*. But as *Serianthes* now becomes *Albizzia*, and *Serianthes grandiflora* of Bentham, should likewise become *Albizzia grandiflora*, we would have two quite different plants belonging to different botanical regions designated with the same specific name. The Australian *Albizzia grandiflora* therefore must surrender its name as already preoccupied by another *Albizzia*, and remains open to accept a new one. Thus a new name was conferred on it by the learned Baron, a most appropriate name, because it is a monument that science builds to one of its devotees, a monument which perpetuates the recollection of the sad fate, which befell Mr. Tozer while in search of the pods of this very scarce plant. This a very touching act of devotion ! Mr. Tozer lost his life in drawing from obscurity one of God's creatures, and his zeal deserves to be preserved.

ROSACEÆ.

Acaena Sanguitorbæ. Wahl. Enum. Pl. 1, 294.

This rosaceous plant so common through N. S. Wales, and southern colonies, becomes very scarce near the Queensland borders. Close to the heights of Wilson's Peak, touching N. S. Wales, and Darling Downs boundaries, some plants of the species may be noticed.

SAXIFRAGEÆ.

Argophyllum Lejournanii, F. v. M. Frag. V., 33.

Not uncommon along the watercourses of the southernmost portion of the district. North and west of Tallebudgera one loses sight of this silver-leaved plant. Its graceful slender aspect, its silvery leaves, and golden flowers should recommend it to the gardener.

Cuttsia viburnea. F. v. M. Frag. V., 42.

Very rare at Wilson's Peak on the road to Warwick.

Quintinia Verdonii. F. v. M. Frag. II., 225.

Both on the top of Tambourine Mountain, and at Tallebudgera in the jungles.

Polyosma Cunninghamsi. J. J. Benn. Pl. Yor. Rar. 196.

This tree not small as described, but large, attaining near one hundred feet in height, is known to the settlers living close to the N. S. Wales littoral boundaries under the vernacular name of "Hickory," and enjoys a good repute as serviceable timber. Many trees of this description were noticed felled on the ground in the clearing of forests.

Weinmannia lachnocarpa. F. v. M. Frag. VIII., 2.

Most plentiful in the scrubs that crown Tambourine Mountains, the Tallebudgera, and Mudgeraba Ridges, if we are to judge from the great number of woolly capsules, which cover spots on the ground all over these jungles.

DROSEDERACEÆ.

Drosera peltata. Sin. in Willd. Sp. Pl. I, 1546.

Common throughout the Logan district.

HALORAGÆ.

Haloragis alata. N. J. Jacq. Jc. Pl. I, p. 69.

Rare on the Logan.

Haloragis teucroides. A. Gray. Bot. Wilk. Expl. Exp. I., 625.

On the Logan very scarce. As the main specific difference between *H. tetragyna* R. Br., and this species consist in the upper bracts being longer than the flowers in *H. teucroides*, and consequently shorter in *H. tetragyna*. There is no doubt as to the

few specimens gathered on the Logan belonging to *H. teucroides*. *H. tetragyna* is very common in these localities, whereas *H. teucroides* seldom occurs in the district.

Myriophyllum varicefolium. J. Hook, Jc. Pl. t. 289.

In many swamps, and slow running creeks.

RHIZOPHOREÆ.

Rhizophora mucronata, Lam. Encyc. meth. VI., 169.

This and the following species reach from the tropics to our southern shores. Not uncommon on the saline swamps at the mouth of the Nerang Creek. I learn from Baron von Müeller, that its bark possesses medicinal properties. It has been tried in cases of hæmaturia. The stripping of the bark, which is of unusual thickness and heavy consistence, may prove a remunerative occupation if a market was open for its ready disposal.

Ceriops Candolleana, Arn. Ann. Nat. Hist. I., 364.

Found in salt-water estuaries. It mingles with *Brugiera Rheedii*, Bl., *Avicennia officinalis*, L., *Ægiceras majus* Gært, all along the southern coast.

MYRTACEÆ.

Bæckea crenulata, R. Br. in Flind. voy. 548.

There are two most remarkable varieties of this plant, one at Burleigh Head, and the other at Stradbroke Island, each occupying the utmost opposite limit within the circle of specific range. The aspect, habit, leaves of both, proclaim them utterly distinct. The one of Stradbroke Island, presents a trailing habit of growth through the mass of entangled vegetation among swamps, with long branches almost flagellate, with closely appressed leaves nearly thrice the size of those of the other variety. The other growing at Burleigh Head, on the other hand is virgate, with smaller and more spreading leaves. Its resemblance with *B. densifolia* Sm., is very striking. When gathering the two on the swampy ground near Stanthorpe, it was no easy matter to discriminate one from the other. *B. densifolia* and this variety of *B. crenulata*, seem more like one another, than the two varieties above mentioned.

Melaleuca thymifolia, Sm. Trans. Linn. Soc. III, 278.

Rather common on wet gullies dividing the ridgy and sandy ground of the Logan. Although it has been recorded by Mr. Bailey in his census of the Brisbane Flora, there is no record placed in any page, of its occurrence in this district.

Eucalyptus robusta, Sm. Spec. Bot. N. Holl. 40.

It was noticed by the writer some years ago, growing in wet places not far off the banks of the Nerang Creek. Since then, herborizing with Mr. F. M. Bailey at Stradbroke Island, we saw it growing there close to Dunwich. Afterwards I followed its course to the Brisbane River, and as far inland as Brown Plains, not far away from the Logan. In all instances, this gum tree was found growing on wet marshy ground, having for its companion, *Melaleuca leucodendron* Lin. Whether this tree crosses over to the north side of the Brisbane River, remains to be proved by further investigation. In that excellent work of Baron von Müller on Eucalypts, the Queensland abode for this Eucalypt is not recorded. To the uses to which it is here mentioned to be applied, it may be added that of its suitability for piles, to be driven in salt or brackish water. Its exceptional fitness to withstand the ravages of what is commonly known as "cobbera," may be ascribable to the presence of Kino-red, to which Müller attributes its freedom from destructive insects.

Eucalyptus leucoxydon, var. *minor*, F. v. M. Trans. Vict. Inst. I, 33.

It barely crosses the boundaries of our Colony near Wilson's Peak. Few trees of this species may be seen among the robust vegetation, which clothes the rugged ridges of Macpherson's Range. It is not the normal type that we see here, but a variety called by Baron von Müller, *minor*. It differs not alone in the smaller size of the flowers, to which I presume its name as a variety has reference, but in its whitish bark, whereas the typical form presents a bark so decidedly dark and rugged as to resemble our iron-barks, by which name it is known to southern colonists. These features afford sufficient ground to keep it as a distinct variety.

Myrtus Beckleri F. v. M. Frag. II., 85.

Tallebudgera Creek.

Eugenia humilampra. F. v. M. IX., 145.

In the jungle along Nerang Creek, close by the sea. A large tree once doubtfully admitted by Baron von Müeller, in Frag. IX., as a new species, and which has now received its full specific rank in his Systematic Census of Australian plants. It could scarcely be confused with *E. Smithii* Poia., its nearest ally.

Eugenia Moorei. F. v. M. Frag. V., 33.

Abundant in the littoral forests towards the boundary lines of the colony. A handsome tree, compact, and of beautiful foliage; it would well answer for shade planting. The fruit is large, round, somewhat flattened, white and not unpalatable. This plant has been considered by Bentham Fl. Austr. III., 285. as identical with *E. Jambolana* Lann. but the much divaricate trichotomous panicles, which arise from the older branches, and as I would observe from the trunk of the tree, the red filaments longer than in *E. Jambolana*, and other characters have induced Baron von Müeller to separate it from the true *E. Jambolana*, and distinguish it with a name commemorative of the services to botanic researches of Mr. C. Moore of the Sydney Botanical Gardens.

Eugenia corynantha. F. v. M. Frag. IX., 144.

A tree of lesser dimensions than the preceding one, with which it may be well associated for the purpose of shade and beauty. It grows in abundance about Tallebudgera. Flowers are not very conspicuous.

Eugenia Hodgkinsoniæ. F. v. M. IX., 145.

In general aspect of foliage and stature similar to *E. corynantha*, F. v. M., and like it a desirable addition to shrubberies. It excels all the others. The copiousness of large flowers in terminal panicles, which emit a sweet perfume even long after they have been plucked renders it superior in a garden to any other rose apple. It is frequently met with in the Tallebudgera jungles, and at the time of flowering the sweetness of its scent spreading for a long distance through the thickness of that rich vegetation makes its presence felt.

Eugenia oleosa. F. v. M. Frag. V. 15.

Either a low undershrub in the open sand banks at Nerang Creek, or a slender tree in the forests both at Nerang Creek and at the southern end of Stradbroke Island. The berries somewhat resemble those of *E. mystifolia*, yet they are more globular, of a deep red colour tending to purple with a tinge of blue. In taste they are quite different. The acid principle which renders the berries of *E. mystifolia* palatable is absent in those of *E. oleosa*.

ONAGRARIÆ.

Epilobium tetragonum. Linn. Sp. Pl., 348.

Very scanty in few localities of the Logan district. Six species of Australian *Epilobium* were kept distinct, and enumerated by Bentham in his *Flora Australiensis*. The gradual passages of one form into another have persuaded Baron von Müller not to acknowledge but one good species, the Linnean *E. tetragonum*. Many species which now are deemed good ones, will undergo the same fate, when inspections of more abundant material show the imperceptible transitions of one form into another.

FICOIDEÆ.

Macarthuria neocambrica, F. v. M. Frag. II, 11.

Both at Stradbroke Island and near Burleigh Head, it grows rather abundantly on sandy soil.

Mollugo spargula, Linn. Sp. Pl. 131, Sec. ed.

At Wilson's Peak. I believe it grows near Brisbane.

UMBELLIFERÆ.

Hydrocotyle laxiflora, DC. Prod. IV., 61.

At Dugundan on the Teviot.

Hydrocotyle tripartita, R. Br. Ann. des sc. phys. VI., 46.

Throughout the Logan.

Hydrocotyle pedicellosa, F. v. M. Frag. IV., 182.

Most plentiful on Tambourine Mountain at Tallebadgera, close to edges of the jungles on damp ground.

Trachymene linearis, Spreng. Sp. Umb., 7.

Trachymene Billardieri, Benth. Fl. Austr. III, 356.

Both have been gathered near Point Danger. All the species included in the genera *Siebera* and *Trachymene*, have been united by Müeller into one genus under the latter appellation. Many characters once held good to distinguish one species from another in the genus *Siebera*, now break down, and these forms become untenable as species. Further discoveries will call for further reduction of species.

ARALIACEÆ.

Panax sambucifolius, Sieb. in Dc. Prod. III, 255.

At Tambourine Mountain.

LORANTHACEÆ.

Loranthus Bidwillii, Benth. Fl. Aust. III., 390.

On branches of *Callitris cupressiformis*, Vent.; it grows at Nerang Creek Heads. The same mistletoe is more widely spread at Stanthorpe on the same kind of pine, and at the mouth of the Mary, from which district the original specimen sent by Mr. Bidwill, whose name it bears, probably came.

RUBIACEÆ.

Randia Moorei. F. v. M. in Fl. Austr. III., 411.

A small tree growing at Yatala near the banks of the Albert, a main tributary to the Logan.

Randia Benthamiana. F. v. M. Frag. IX., 180.

At Tallebudgera this small shrub occasionally may be met with. The inflorescence, flowers, shape of fruit globular in outline, all bespeak a species quite distinct from *R. charbacea* with which it may be confused in its living state.

Randia dentiflora. Benth. Fl. Hough., 153.

On the Coomora. I gathered specimens of the same species in the Burnett district, where it attains larger dimensions.

Ixora Beckleri. Benth. Fl. Austr. III., 415.

On the Coomora.

Timonius Rumphii. Dc. Prod. IV., 461.

At Peel Island and Stradbroke Island.

Knoxia corymbosa Willd. Spec. Pl. I., 582.

At Mudgeraba, and Knapp's Creek. Even in these two places it seems to be scarce.

Asperula oligantha F. v. M. in Heerl. Kamid. Arch. IV.

The variety *conferta*, once acknowledged as a distinct species is very common on the flats of the Upper Lagoon. Another variety *elongata* was gathered by the writer at Stanthorpe. Under the name *A. oligantha* Baron von Müeller, in Frag. IX., 187, has collected *A. subsimplex* Hook. *A. scoparia*, Hook. *A. Gunui*, Hook. *A. pusilla*, Hook. *A. mimina*, Hook.

Galium australe. Dc. Prod. IV., 608.

On the Logan. Under *Galium australe*, the forms *aporinc*, and *albescens* are now included; and under *G. umbrosum* of Solander we have varieties of *G. geminifolium* F. v. M. *Gaudichaudi* Dc. and *ciliare* Hook. Without much hesitation the genera *Galium* and *Asperula* may be thrown into one, as they do not present important generic differences. The reduction of species in both genera may portend generic reduction.

CONTRIBUTION TO A KNOWLEDGE OF THE FISHES OF NEW
GUINEA, No. 4.

BY WILLIAM MACLEAY, F.L.S., &c.

In my three previous papers on this subject, I gave a list of all the fishes collected by Mr. Goldie at and about Port Moresby, and a few places on the coast lying north and west from it; I now give the results of his labours in the extreme south east of New Guinea, including collections made at Hood Bay and eastward to the D'Entrecasteaux Group of Islands. A few only are from the Gulf of Papua.